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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,441	07/31/2003	Markus L. Rossmann	200206980-1 4553	
	7590 10/17/200 CKARD COMPANY	EXAMINER		
	00, 3404 E. HARMON	FRENEL, VANEL		
INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			ART UNIT	PAPER NUMBER
			3687	
			NOTIFICATION DATE	DELIVERY MODE
			10/17/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

JERRY.SHORMA@HP.COM mkraft@hp.com ipa.mail@hp.com

Office Action Summary		Application No.	Δ.	Applicant(s)				
		10/633,441	F	ROSSMANN ET AL.				
		Examiner	Δ	Art Unit				
		VANEL FRENEL	3	8687				
Period fo	The MAILING DATE of this communication ap or Reply	pears on the cover s	heet with the cor	respondence ac	idress			
WHIC - Exter after - If NC - Failu Any (ORTENED STATUTORY PERIOD FOR REPLEHEVER IS LONGER, FROM THE MAILING Designs of time may be available under the provisions of 37 CFR 1.5 SIX (6) MONTHS from the mailing date of this communication. Poeriod for reply is specified above, the maximum statutory period re to reply within the set or extended period for reply will, by statutively received by the Office later than three months after the mailing adaptant term adjustment. See 37 CFR 1.704(b).	PATE OF THIS COM 136(a). In no event, however will apply and will expire SIX e, cause the application to be	MUNICATION. In, may a reply be timely ((6) MONTHS from the ecome ABANDONED (/ filed e mailing date of this c (35 U.S.C. § 133).				
Status								
1)[\	Responsive to communication(s) filed on <u>6/18</u>	2/08						
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٥,١	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Dispositi	on of Claims	,	,					
-		application						
•—	Claim(s) <u>1-11 and 15-30</u> is/are pending in the application.							
	4a) Of the above claim(s) is/are withdrawn from consideration.							
	5) Claim(s) is/are allowed. 6) 区 Claim(s) <u>1-11 and 15-30</u> is/are rejected.							
· ·	Claim(s) is/are objected to.							
•	Claim(s) is/are objected to: Claim(s) are subject to restriction and/o	or election requireme	ent					
ا ا	are subject to restriction and/o	or election requireme	5111.					
Applicati	on Papers							
9)	The specification is objected to by the Examine	er.						
10)	10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.							
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority ι	ınder 35 U.S.C. § 119							
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 								
2) Notic 3) Inform	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date 20030731.	Pa 5) No	terview Summary (P [*] aper No(s)/Mail Date. otice of Informal Pate ther:	· ·				

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DETAILED ACTION

Notice to Applicant

1. This communication is in response to the Amendment filed on 6/18/08. Claims 12-14 have been cancelled. Claims 1-2, 8, 18-19, 27 and 30 have been amended. Claims 1-11, 15-30 are pending.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-7 and 18-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sullivan (2003/0093320) in view of Gryglewicz et al. (6,993,502) and further in view of Miller et al. (5,550,968).
- (A) As per claims 1-7 and 18-30, Sullivan discloses a computer program product including program code, when executed on a computer system, for providing an interface between a calling application and at least one callable application (See Sullivan, Page 1, Paragraph 0002; Page 15, Paragraph 0129).

Sullivan, however does not explicitly disclose a computer program product having said program code representing a computer program which implements at least two controllers which cooperate with each other and are at different hierarchical levels, wherein said controllers are instances of a generic controller.

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Gryglewicz shows a computer program product having said program code representing a computer program which implements at least two controllers which cooperate with each other and are at different hierarchical levels, wherein said controllers are instances of a generic controller (See Gryglewicz, Col.5, lines 55-67 to Co1.6, line 30).

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It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the feature of Gryglewicz within the system of Sullivan with the motivation of utilizing table-driven technologies to apply existing tax code definitions for both conventionally taxed goods and services as well as digital goods and services provided electronically over the Internet (See Gryglewicz, Co1.4, lines 31-35).

Sullivan and Gryglewicz teach all the limitations above except "wherein the generic controller is a class, and the at least two controllers are subclasses inherited from the generic controller class". Therefore, Miller shows this limitation "wherein the generic controller is a class, and the at least two controllers are subclasses inherited from the generic controller class" (See Miller, Col.7, lines 25-54).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the feature of Miller within the collective teachings of Gryglewicz and Sullivan with the motivation of providing an object class for providing limiting user interaction to controls defined in a graphical user interface to which said object class is applied (See Miller, Col.4, lines 61-67).

As per claim 2, Sullivan discloses the computer program product wherein the computer program is written in an object-oriented programming language (See Sullivan, Page 15, Paragraph 0129).

As per claim 3, Gryglewicz discloses the computer program product wherein the calling application is a computerized business application or an online request handling application (See Gryglewicz, Co1.5, lines 46-67; Co1.6, lines 61-67).

As per claim 4, Gryglewicz discloses the computer program product wherein the at least one callable application is a transaction-tax service application (See Gryglewicz Co1.7, lines 30-67).

As per claim 5, Gryglewicz discloses the computer program product wherein the at least one transaction-tax service application is a transaction-tax calculation application or a transaction-tax logging application (See Gryglewicz, Col.2, lines 47-59; Col.6, lines 25-60).

As per claim 6, Gryglewicz discloses the computer program product providing an interface to at least two transaction-tax service applications, said transaction-tax service applications comprising at least two different transaction-tax calculation applications (See Gryglewicz, Col.7, lines 1-50).

As per claim 7, Gryglewicz discloses the computer program product wherein the controller at the higher hierarchical level is arranged for controlling an overall logic processing of the interface, and the controller or controllers at the lower hierarchical level is or are arranged for controlling a processing of the interface specific to the callable application or applications with which the respective controller is associated (See Gryglewicz, Col.8, lines 8-53).

4. Claims 8-11 and 15-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sullivan (2003/0093320) in view of Gryglewicz et al. (6,993,502)

As per claim 18, Sullivan discloses a method of implementing a programmed interface between a calling application and at least one callable application (See Sullivan, Page 1, Paragraph 0002; Page 15, Paragraph 0129). Sullivan, however, does not explicitly disclose comprising: coding at least two controllers at different hierarchical levels, wherein said controllers are instances of a generic controller.

Gryglewicz shows coding at least two controllers at different hierarchical levels, wherein said controllers are instances of a generic controller (See Gryglewicz, Col.5, lines 55-67 to Co1.6, line 30).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the feature of Gryglewicz within the system of Sullivan with the motivation of utilizing table-driven technologies to apply existing tax code definitions for both conventionally taxed goods and services as well as digital goods and services provided electronically over the Internet (See Gryglewicz, Co1.4, lines 31-35).

Sullivan and Gryglewicz teach all the limitations above except "wherein the

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generic controller is a class, and the at least two controllers are subclasses inherited from the generic controller class". Therefore, Miller shows this limitation "wherein the generic controller is a class, and the at least two controllers are subclasses inherited from the generic controller class" (See Miller, Col.7, lines 25-54).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the feature of Miller within the collective teachings of Gryglewicz and Sullivan with the motivation of providing an object class for providing limiting user interaction to controls defined in a graphical user interface to which said object class is applied (See Miller, Col.4, lines 61-67).

As per claim 19, Gryglewicz discloses the method wherein the controllers are coded in an object-oriented programming language (See Gryglewicz, Co1.5, lines 45-67).

As per claim 27, Sullivan discloses a computer program product including program code, when executed on a computer system, for providing an interface between a calling application and at least two transaction-tax calculation applications, said interface is arranged to carry out, when called by the calling application, at least one of: selecting one of the transaction-tax calculation applications depending on a transaction attribute (See Sullivan, Page 1, Paragraphs 0002; Page 15, Paragraph 0129),

Sullivan does not explicitly disclose "said interface including at least two controllers that cooperate with each other and are different hierarchical levels, wherein the controllers are instances of a generic controller,

calling the selected transaction-tax calculation application and receiving a response from the called transaction-tax calculation application; and calling at least two of the transaction-tax calculation applications, comparing the responses returned by them.

However, these features are known in the art, as evidenced by Gryglewicz. In particular, Gryglewicz shows "said interface including at least two controllers that cooperate with each other and are different hierarchical levels, wherein the controllers are instances of a generic controller (See Gryglewicz, Col.5, lines 55-67 to Co1.6, line 30), calling the selected transaction-tax calculation application and receiving a response from the called transaction-tax calculation application (See Gryglewicz, Co1.7, lines 1-45); and calling at least two of the transaction-tax calculation applications, comparing the responses returned by them (See Gryglewicz, Co1.7, lines 1-35).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the feature of Gryglewicz within the system of Sullivan with the motivation of utilizing table-driven technologies to apply existing tax code definitions for both conventionally taxed goods and services as well as digital goods and services provided electronically over the Internet (See Gryglewicz, Co1.4, lines 31-35).

Sullivan and Gryglewicz teach all the limitations above except "wherein the generic controller is a class, and the at least two controllers are subclasses inherited

from the generic controller class". Therefore, Miller shows this limitation "wherein the generic controller is a class, and the at least two controllers are subclasses inherited from the generic controller class" (See Miller, Col.7, lines 25-54).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the feature of Miller within the collective teachings of Gryglewicz and Sullivan with the motivation of providing an object class for providing limiting user interaction to controls defined in a graphical user interface to which said object class is applied (See Miller, Col.4, lines 61-67).

As per claim 28, Gryglewicz discloses the computer program product wherein the interface is further arranged to return a response to the calling application based on the response from the called transaction-tax calculation application or, if at least two transaction-tax calculation applications have been called, based on the comparison (See Gryglewicz, Col.7, lines 1-45).

As per claim 29, Gryglewicz discloses the computer program product wherein the interface is further arranged to direct a response for logging purposes to a logging controller based on the response from the called transaction-tax calculation application or, if at least two transaction-tax calculation applications have been called, based on the comparison (See Gryglewicz, Col.9, lines 1-42).

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As per claim 30, Sullivan discloses a software-implemented method of interfacing a calling application and at least two transaction-tax calculation applications, comprising, when a call is received from the calling application, at least one of: selecting one of the transaction-tax calculation applications depending on a transaction attribute, (See Sullivan, Page 1, Paragraphs 0002; Page 15, Paragraph 0129).

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Sullivan does not explicitly disclose calling the selected transaction-tax calculation application and receiving a response from the called transaction-tax calculation application; and calling at least two of the transaction-tax calculation applications and comparing the responses returned by them, "wherein the interfacing is provided by an interface including at least two controllers that cooperate with each other and are different hierarchical levels, wherein the controllers are instances of a generic controller.

However, these features are known in the art, as evidenced by Gryglewicz. In particular, Gryglewicz suggests calling the selected transaction-tax calculation application and receiving a response from the called transaction-tax calculation application (See Gryglewicz, Col.7, lines 1-45); and calling at least two of the transaction-tax calculation applications and comparing the responses returned by them (See Gryglewicz, Col.7, lines 1-35), "wherein the interfacing is provided by an interface including at least two controllers that cooperate with each other and are different hierarchical levels, wherein the controllers are instances of a generic controller" (See Gryglewicz, Col.5, lines 55-67 to Co1.6, line 30).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the feature of Gryglewicz within the system of Sullivan with the motivation of utilizing table-driven technologies to apply existing tax code definitions for both conventionally taxed goods and services as well as digital goods and services provided electronically over the Internet (See Gryglewicz, Co1.4, lines 31-35).

Sullivan and Gryglewicz teach all the limitations above except "wherein the generic controller is a class, and the at least two controllers are subclasses inherited from the generic controller class". Therefore, Miller shows this limitation "wherein the generic controller is a class, and the at least two controllers are subclasses inherited from the generic controller class" (See Miller, Col.7, lines 25-54).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the feature of Miller within the collective teachings of Gryglewicz and Sullivan with the motivation of providing an object class for providing limiting user interaction to controls defined in a graphical user interface to which said object class is applied (See Miller, Col.4, lines 61-67).

As per claim 8, Sullivan discloses a computer program product including program code, when executed on a computer system, for providing an interface between a calling application and at least one callable application (See Sullivan, Page 1, Paragraph 0002; Page 15, Paragraph 0129),

wherein the controller at the higher hierarchical level is arranged for receiving an input request from the calling application and sending an output request to the controller

at the lower hierarchical level, and receiving an output response from the controller at the lower hierarchical level as an input response (See Sullivan, Page 4, Paragraph 0047), the controller at the lower hierarchical level is arranged for receiving the output request of the controller at the higher hierarchical level as an input request, sending an output request to the callable application or one or more of the callable applications to which it is associated, receiving an input response from the callable application or applications, and sending an output response to the controller at the higher hierarchical level (See Sullivan, Page 6, Paragraph 0059).

Sullivan, however, does not explicitly disclose "wherein the controller at the higher hierarchical level is arranged for controlling an overall logic processing of the interface, and the controller or controllers at the lower hierarchical level is or are arranged for controlling a processing of the interface specific to the callable application or applications with which the respective controller is associated". Therefore, Gryglewicz shows "wherein the controller at the higher hierarchical level is arranged for controlling an overall logic processing of the interface, and the controller or controllers at the lower hierarchical level is or are arranged for controlling a processing of the interface specific to the callable application or applications with which the respective controller is associated (See Gryglewicz, Col.8, lines 8-53).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the feature of Gryglewicz within the system of Sullivan with the motivation of utilizing table-driven technologies to apply existing tax code definitions

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for both conventionally taxed goods and services as well as digital goods and services provided electronically over the Internet (See Gryglewicz, Co1.4, lines 31-35).

As per claim 9, Gryglewicz discloses the computer program product providing an interface to at least two callable applications of a same type, wherein the specific processing for which the controller at the lower hierarchical level and assigned to the at least two callable applications is arranged comprises deciding to which one of the at least two callable applications the output request is sent (See Gryglewicz, Col.37, lines 1-41).

As per claim 10, Gryglewicz discloses the computer program product wherein the at least two callable applications of the same type are transaction-tax calculation applications (See Gryglewicz, Co1.9, lines 14-41).

As per claim 11, Sullivan discloses the computer program product wherein the controllers comprise at least one of the following components: an input/output module; an input parser; a validation engine; a universal state machine; a knowledge base module; a process carrier (See Sullivan, Page 15, Paragraphs 0127-0128).

As per claim 15, Sullivan discloses a software-implemented method of interfacing a calling application and at least one callable application (See Sullivan, Page 1, Paragraph 0002; Page 15, Paragraph 0129).

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Sullivan, however does not explicitly disclose that the software method comprising: using at least two software-implemented controllers at different hierarchical levels; performing, both with the controllers at the higher and lower hierarchical levels, a sequence of steps comprising: upon receipt of an input request from an higher hierarchical level element, which is the calling application or a controller at a higher hierarchical level, performing input request handling, sending at least one output request to at least one lower hierarchical level element, which is a controller at a lower hierarchical level or the at least one callable application, receiving an input response to the at least one output request from the lower hierarchical level element, sending an output response to the higher hierarchical level element, wherein the output request of the controller at the higher hierarchical level is the input request to the controller at the lower hierarchical level, and the output response of the controller at the lower hierarchical level is the input response to the controller at the higher hierarchical level. However, these features are known in the art, as evidenced by Gryglewicz. In particular, Gryglewicz suggests that the software method having comprising: using at least two software-implemented controllers at different hierarchical levels (See Gryglewicz, Fig.8; Co1.5, lines 45-67 to Co1.6, line 60; Co1.7, lines 1-44); performing, both with the controllers at the higher and lower hierarchical levels (See Gryglewicz, Co1.22, lines 60-67 to Co1.23, line 23), a sequence of steps comprising: upon receipt of an input request from an higher hierarchical level element, which is the calling application or a controller at a higher hierarchical level (See Gryglewicz, Fig.3; Fig.4; Co1.8, lines 54-67 to Co1.9, line 42), performing input request handling, sending at least one output request to at

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least one lower hierarchical level element, which is a controller at a lower hierarchical level or the at least one callable application, receiving an input response to the at least one output request from the lower hierarchical level element, sending an output response to the higher hierarchical level element, wherein the output request of the controller at the higher hierarchical level is the input request to the controller at the lower hierarchical level, and the output response of the controller at the lower hierarchical level is the input response to the controller at the higher hierarchical level (See Gryglewicz, Co1.10, lines 45-67 to Col.11, line 27; Col.30, lines 18-64).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the feature of Gryglewicz within the system of Sullivan with the motivation of utilizing table-driven technologies to apply existing tax code definitions for both conventionally taxed goods and services as well as digital goods and services provided electronically over the Internet (See Gryglewicz, Col.4, lines 31-35).

Claims 16-17 and 20-26 recite the underlying process steps of the elements of claims 4-5 and 7-11, respectively. As the various elements of claims 4-5 and 7-11 and have been shown to be either disclosed by or obvious in view of the collective teachings of Sullivan, Gryglewicz and Miller, it is apparent that the apparatus disclosed by the applied prior art performs the recited underlying functions. As such, the limitations recited in claims 16-17 and 20-26 are rejected for the same reasons given above for claims 4-5 and 7-11, and incorporated herein.

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5. Examiner's Note; Examiner has cited particular columns and line numbers in the references as applied to the claims below for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant, in preparing the responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Response to Arguments

- 6. Applicant's arguments filed on 6/18/08 with respect to claims 1-11, 15-30 have been considered but are moot in view of the new ground(s) of rejection.
- 7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VANEL FRENEL whose telephone number is (571)272-6769. The examiner can normally be reached on 6:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew S. Gart can be reached on 571-272-3955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Matthew S Gart/ Supervisory Patent Examiner, Art Unit 3687

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Examiner, Art Unit 3687

October 13, 2008